

**BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, DC 20554**

In the Matter of)	
)	
Octatron, Inc. and Chang Industry, Inc.)	ET Docket No. 05-356
)	
Request for Waiver of Sections 15.247(b),)	
15.247(e), and 15.249(a) of the Rules and)	
Regulations)	

To: Chief, Office of Engineering and Technology

**COMMENTS
OF THE
AMERICAN PETROLEUM INSTITUTE**

The American Petroleum Institute ("API"), by its attorneys, is pleased to submit these Comments to the Federal Communications Commission ("FCC" or "Commission") in response to the Public Notice released on December 29, 2005 regarding the above-captioned Request for Waiver filed by Octatron, Inc. and Chang Industry, Inc. (collectively, "Petitioners").¹ For the reasons discussed below, API opposes the grant of this Request for Waiver.

I. PRELIMINARY STATEMENT

1. API is a national trade association representing approximately 400 companies involved in all phases of the petroleum and natural gas industries, including the exploration, production, refining, marketing and transportation of petroleum, petroleum products and natural

¹ *Office of Engineering and Technology Declares Octatron, Inc. and Chang Industry, Inc. Request for a Waiver of Part 15 to be a "Permit-but-Disclose" Proceeding for Ex Parte Purposes*, ET Docket No. 05-356, DA 05-3339 (rel. Dec. 29, 2005).

gas. The API Telecommunications Committee is one of the standing committees of the organization's General Committee on Information Management & Technology. The Telecommunications Committee evaluates and develops responses to state and federal proposals affecting telecommunications facilities used in the petroleum and natural gas industries.

2. API's Telecommunications Committee is supported and sustained by companies that are authorized by the Commission to operate telecommunications systems in various of the licensed radio services. For instance, API's members utilize facilities in the Private Land Mobile Radio Services ("PLMRS"), licensed under Part 90 of the FCC's rules, to support the search for and production of oil and natural gas, to ensure the safe pipeline transmission of natural gas, crude oil and refined petroleum products, to process and refine these energy sources and to facilitate their ultimate delivery to industrial, commercial and residential customers. Many API member companies also utilize facilities authorized in the Private Operational-Fixed Microwave Services ("POFS") pursuant to Part 101 to serve a variety of vital telecommunications functions (e.g., communications with remote oil and gas exploration and production sites for voice and data applications, communications with refineries, the extension of circuits to remote pipeline pump and compressor stations, and supervisory control and data acquisition systems ("SCADA") that remotely monitor and control oil and gas wells, and pipelines). Additionally, some API member companies operate ship and private coast radio facilities (authorized under Part 80) and aviation radio facilities (governed by Part 87).

3. As a supplement to the aforementioned licensed radio systems, many API member companies operate unlicensed "spread spectrum" systems in the 902-928 MHz, 2.4 GHz and 5.8 GHz bands for both point-to-point and point-to-multipoint communications systems. These systems (like the licensed systems discussed above) are used for a variety of voice, as well

as data, services for monitoring and control functions that help petroleum and natural gas companies conduct their day-to-day operations in a safe and efficient manner.

4. The continued operation of the licensed and unlicensed private radio systems employed by petroleum and natural gas companies is absolutely essential to protecting lives, health and property, both in support of the day-to-day operations of these companies, as well as during responses to emergency incidents. These systems are integral to the provision of our nation's energy resources to the public. Due to the critical importance of such systems to the operations of its members, API has been an active participant in all of the Commission's major rule making proceedings that have addressed the use of spectrum in the private (licensed) radio services and the availability of spectrum for unlicensed applications such as spread spectrum devices. API is participating in this waiver matter due to concerns that grant of the requested waiver could imperil important API member company spread spectrum operations in the 902-928 MHz band.

II. COMMENTS

5. Petitioners are seeking to deploy devices that, purportedly, would be used to provide law enforcement, counter-terrorism, and government security personnel with live video and audio surveillance of locations that are difficult or impossible to observe directly. Petitioners have requested waiver of certain sections of Part 15 of the Commission's rules to allow the operation of one-watt analog transmitters in the 902-928 MHz band in connection with these devices. A waiver of the rules is needed because, while the Commission's rules currently permit up to four watts E.I.R.P. in this band for digital modulations that meet certain power spectral density limits, analog modulations are generally limited to less than one milliwatt E.I.R.P.

6. In support of their waiver request, Petitioners claim that it would be infeasible to employ digital modulation with respect to these devices because “digital modulation would require more power within the devices which would result in reduced battery life or increased battery size...” for the two devices. (Waiver Request at ¶ 3). Petitioners also contend that “[p]otential interference will be confined to a very limited area and the duration of such interference would typically be very brief.” (Waiver Request at ¶ 13).

7. The petroleum and natural gas industries make extensive use of unlicensed spread spectrum devices that operate in the 902-928 MHz band because of the lack of suitable licensed frequency assignments. Operation of the proposed devices at the power levels requested could cause disruption of services wherever and whenever uncoordinated use occurs. In a worst case scenario, these operations could cause an emergency incident to become even more severe.

8. Although unlicensed spectrum users are not entitled to protection against interference, the Commission has adopted certain technical rules, such as emissions and transmitter power limits, to promote an operating environment where multiple unlicensed users can co-exist. Waiver of these power and emissions limits could upset this delicate balance and render worthless equipment that is used by petroleum and natural gas companies to provide important safety-related functions.

9. API also questions Petitioners’ claim that it would be infeasible to manufacture their devices with digital modulation. API is aware of existing technology that allows video to be transmitted digitally within the spectral density guidelines that apply to four watt operations under Part 15 of the Commission’s rules. While it is possible that the implementation of such technology could increase both the cost and the power consumption of the Petitioners’ devices, API does not believe that these increases would be so substantial as to materially impair the

utility of the devices. If the Commission enforces its existing Part 15 power limitations for analog devices in situations like that presented here -- as API believes it should -- manufactures will have incentives to develop digital equipment that would enable not only this particular application, but possibly many others as well. If, on the other hand, the Commission allows Petitioners and others to evade the rules, it will threaten the reliability and the utility of compliant devices that already are being used today and that, like the spread spectrum equipment used by API member companies, serve vital safety functions.

10. Of additional concern is the fact that, while Petitioners claim that their equipment will be used by law enforcement personnel, their waiver request does not, on its face, state that Petitioners would only be permitted to sell their devices to such entities. This omission raises the possibility that actual dissemination and use of these devices could be much more widespread than Petitioners suggest and, as a result, could create a greater potential for interference to other unlicensed devices in the 902-928 MHz band. To address this problem, the Commission should, at the very least, impose a restriction such as that recently adopted in the "Remington Arms" situation. There, the Commission granted a similar waiver request, but, in order to reduce the potential for interference to other unlicensed devices, expressly required that the device in question be sold only to law enforcement agencies that are eligible for licensing under Section 90.20 of the Commission's rules.²

11. API further notes that Petitioners' devices appear to serve the exact same function as the device that was the subject of the Remington Arms Waiver. In its Request for Rule Waiver, Remington Arms asserted that its device would be used to provide law enforcement,

² See In the Matter of Remington Arms Company, Inc. Request for a Waiver of Part 15 Regulations, Order, ET Docket No. 05-183, FCC 05-194, at ¶¶ 1 and 12 (rel. Nov. 18, 2005) (hereinafter, "Remington Arms Waiver").

counter-terrorism, and security personnel with live video and audio surveillance of locations that could not otherwise be observed.³ Accordingly, there is no need for the Commission to waive its rules to allow operation of additional devices that serve the same function, particularly given that the operation of these devices may cause destructive interference to other users of the 902-928 MHz band.

III. CONCLUSION

12. Petitioners have not provided adequate justification for their requested waiver of the Commission's Part 15 requirements. Their proposed application presents a real risk of destructive interference to existing unlicensed operations in the 902-928 MHz band -- particularly if Petitioners are permitted to market their devices outside of the law enforcement community. Additionally, Petitioners have not sufficiently demonstrated that it would be infeasible to utilize digital modulation with respect to their devices, and the devices would not serve a unique function. Accordingly, the waiver request should be denied.

³ See In re Petition of Remington Arms Company, Inc. for Waiver of Sections 15.245, 15.247(b) and 15.247(e) of the Rules and Regulations, at ¶ 1 (filed April 22, 2005).

WHEREFORE, THE PREMISES CONSIDERED, the American Petroleum Institute respectfully submits the foregoing Comments and urges the Federal Communications Commission to act in a manner consistent with the views expressed herein.

Respectfully submitted,

**THE AMERICAN PETROLEUM
INSTITUTE**

By: /s/ Wayne V. Black

Wayne V. Black
Nicole B. Donath
Keller and Heckman LLP
1001 G Street, Suite 500 West
Washington, D.C. 20001
(202) 434-4100

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Its Attorneys

CERTIFICATE OF SERVICE

I, Neenah Gay, an administrative assistant at the law firm of Keller and Heckman LLP, do hereby certify that on this 30th day of January, 2006, a copy of the foregoing Comments of the American Petroleum Institute has been served by first class mail, postage prepaid, on the following:

William Cook
Adrian B. Copiz
Alston & Bird LLP
601 Pennsylvania Avenue, NW
North Building, 10th Floor
Washington, DC 20004

Counsel for Octatron, Inc. and Chang Industry, Inc.

Bruce Franca
Acting Chief
Office of Engineering and Technology
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554



Neenah Gay